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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,998

12/18/2006

Charles Sfeir

250030

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23460

7590

02/09/2009

LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

EXAMINER

SAIDHA, TEKCHAND

ART UNIT

PAPER NUMBER

1652

MAIL DATE

DELIVERY MODE

02/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/568,998	<b>Applicant(s)</b> SFEIR ET AL.	
	<b>Examiner</b> Tekchand Saidha	<b>Art Unit</b> 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-104 is/are pending in the application.
- 4a) Of the above claim(s) 1-82 and 87-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 83-86 and 99-104 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claim 1-104 are present in this application.
2. Applicants previously elected Group VII (claims 85-86, SEQ ID NO: 1 & 2) for prosecution. Applicants request that claims 83-84 & 90-98 which link Groups VII & VIII be examined as well. Applicants' arguments are considered and found to be persuasive with respect to claims 83 & 84. Claims 90-98 requiring further election of invention of species is a distinct invention and is not considered linking as far as the elected sequences of SEQ ID NO: 1 and 2 are concerned. Further, Applicants were required under 35 U.S.C. 121 to elect a single SEQ ID NO: for prosecution on the merits to which the claims shall be restricted. This is a restriction requirement and not an election of species. However, Applicants were given the benefit of examination of two sequences instead of one.

Accordingly claims 83-86, and new claims 99-104 will be examined here.

Note: When all claims directed to the elected invention are allowable, should any linking claim be allowable, the restriction requirement between the linked inventions be withdrawn. See MPEP 803.02 and 821.04.

3. **Claims withdrawn**:

Claims 1-82 & 87-98 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Drawings replacement sheets are acceptable. New sequence listing filed is acceptable and/or in compliance with the sequence rules.

5. **Claim Rejections - 35 USC § 112 (second paragraph)**

Claims 85-86 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claims 85-86, line 2, recite the phrase 'consisting essentially of...'. The claim is unclear about what is included and what is excluded. The specification fails to provide a clear definition of the phrase. Thus the meets and bounds of the claims are unclear. Deleting 'essentially' is suggested to overcome this rejection.

Art Unit: 1652

(b) Claims 85-86, line 1, recite abbreviation 'PP'. The first use of an uncommon abbreviation must be spelled out, and which be subsequently abbreviated. Correction is required.

6. ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 83-86, and new claims are 99-104 rejected under 35 U.S.C. 102(b) as being anticipated by Accession number P97399 (June 1, 1998). Accession number P97399 is Dentin sialophosphoprotein precursor (Dentrin matrix protein 3, DMP-3) which in solution comprises a composition and is 100% identical to SEQ ID NO: 1 & 2 of claims 85-86 & 99-104. The reference anticipates the claims. Since prior art is found against the elected invention the linking claims are rejected as well (MPEP 809). (See the enclosed sequence search alignments).

7. Claims 83-84 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 4,698,326 A. USP '326 teach composition comprising phosphophoryn and optionally collagen for promoting new bone formation. The reference further teach osseous repair composition which is a composition for strengthening tooth and would be considered equivalent to oral rinse or toothpaste formulations. The reference anticipates the claims.

8. Claims 83-84 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 7,078,021 B2. USP '021 B2 teaches compositions or products which promote bone growth and used as dental products such as toothpastes, mouthwash and dental floss. The bone-tooth matrix phosphoglycoproteins component of the proteins include osteopontin (OPN), dentin sialophosphoprotein (DSPP), dentin matrix protein 1 (DMP1), and bone sialoprotein II (IBSP). Phosphophoryn (PP) is a cleavage product of DSPP. The reference anticipates the claims.

9. It may be noted that phosphophoryn is also commercially available from, for example, Wako Pure Chemical industries, Ltd., and is described in US 200601788544 A1.

Art Unit: 1652

10. No claim is allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tekchand Saidha whose telephone number is (571) 272 0940. The examiner can normally be reached between 8.30 am - 5.00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nashaat Nashed can be reached on (571) 272 0934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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